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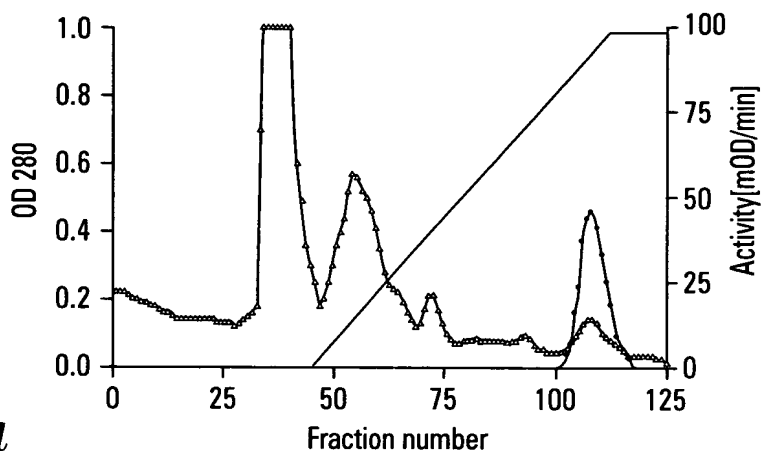


Fig. 1a

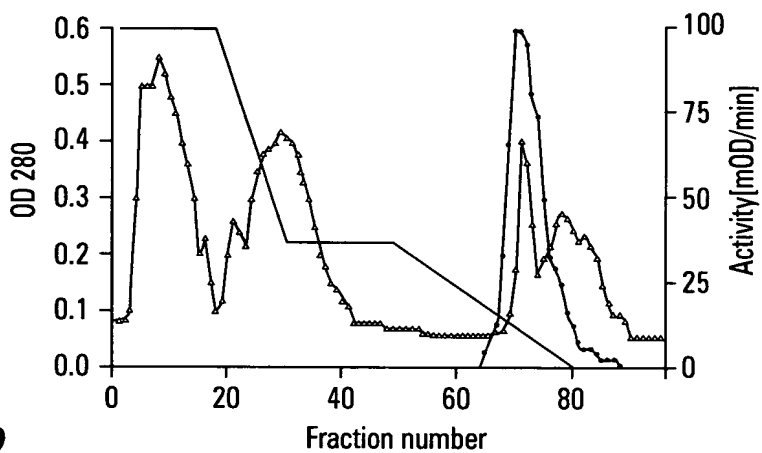


Fig. 1b

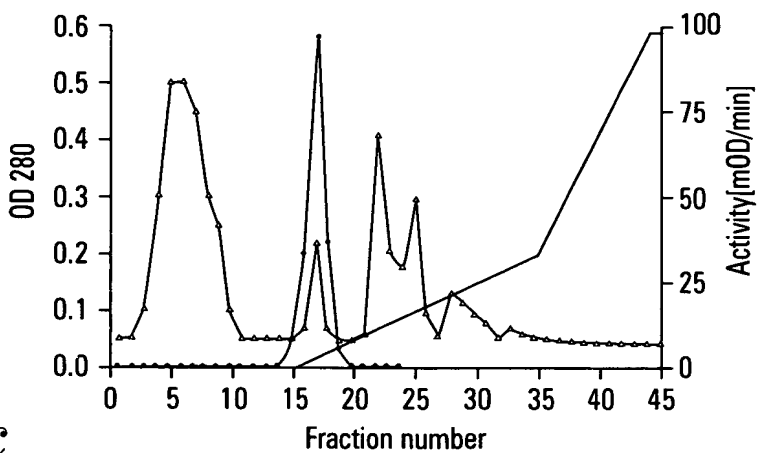


Fig. 1c

Title: DIPEPTIDYLPEPTIDASES AND METHODS OF USE
Applicant(s): TRAVIS et al.
Serial No.: 10/008,355
Express Mail No.: EV405492271 US

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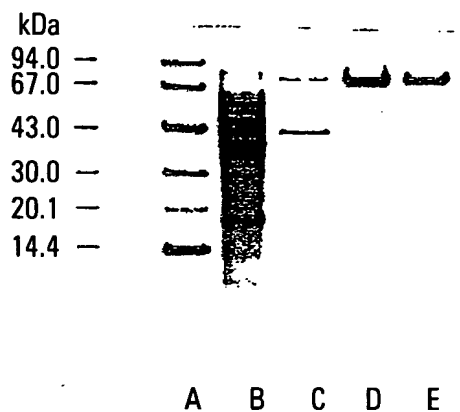


Fig. 2

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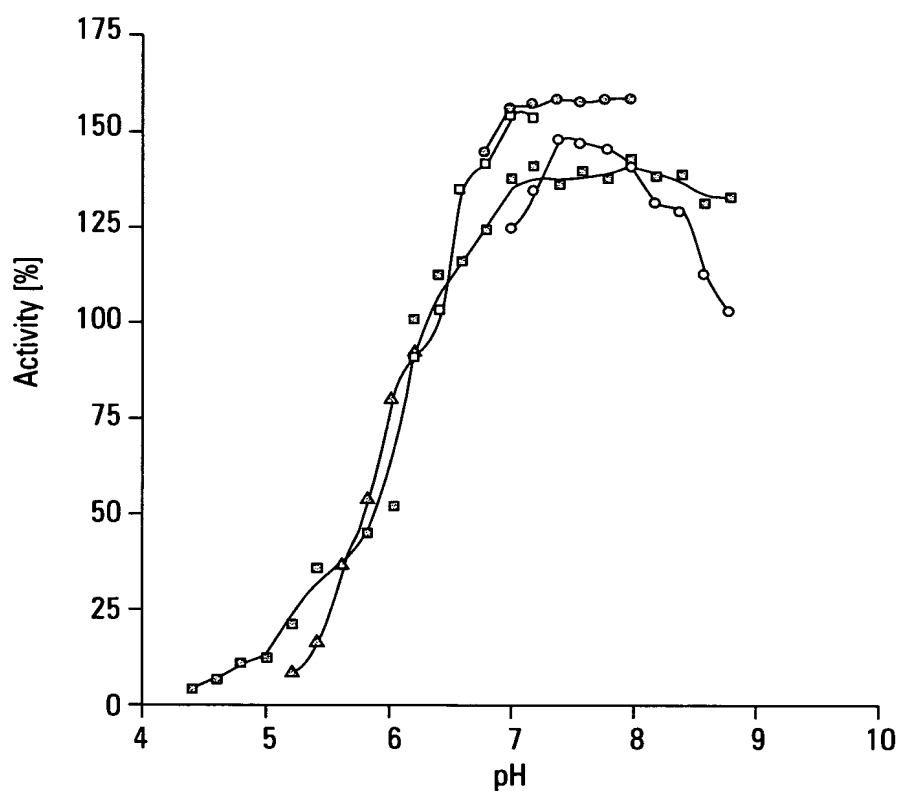


Fig. 3



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Fig. 4a

Fig. 4b

Fig. 4

Fig. 4a

SEQ ID NO:1 atgcaaatgaaataaaagtattcttcgagagagccctgctgttggtgcttcagggttagccaaagccgacaaagcgatgtggctc 90
SEQ ID NO:2 M Q M K L K S I L L G A A L L L G A S G V A K A D K G M W L 30

ctcaacgaactcaatcaggagaaatctggatcggaatgcgtgagctcggtcttaccgtctcccgctggattcgctctacagtttcgacaaagccg 180
L N E L N Q E N L D R M R E L G F T L P L D S L Y S F D K P 60

tccattgccaatgccgtggttattcttcggtggcggtatccagtgctccgattcagggcctgatctttaccacaccaccactgc 270
S I A N A V V I F G G C T G I T V S D Q G L I F T N H H C 90

ggatacgggtgctatccagagccaaagcacggtggatcacgactatctgcgcgatggtttctgtttctgcacgatgggtgagggagcttc 360
G Y G A I Q S Q S T V D H D Y L R D G F V S R T M G E E L P 120

attccgggtcttccgtgaagtatctgcgcaagatcgtgaaggtaacggacaaggtagaaggacagctcaagggtatcactgacgagatg 450
I P G L S V K Y L R K I V K V T D K V E G Q L K G I T D E M 150

gagcgtctgcgcaagctcaggaggtatgccaaagaactggccaaaaaataatgcagacgagaaacaaactctgcacgtatagagccttc 540
E R L R K A Q E V C Q E L A K E N A D E N Q L C I V E P F 180

tattccaaacgaataacttctcatcgtctacgatgtattcaaggacgttcgtatggtattgtctctccagctctgttagtaagtcc 630
Y S N N E Y F L I V Y D V F K D V R M V F A P S S V G K F 210

ggaggcgatacggacaactggatgtggccgctcacacggcgacttcagcgtattccgctgtatgccggtgccgacaaaccggcgcc 720
G G D T D N W M W P R H T G D F S V F R V Y A G A D N R P A 240

gaatacagcaaggacaataaacccctataaagcccggttacttcgctgcgtatccatgcaagggtacaaggctgacgactatgccatgacc 810
E Y S K D N K P Y K P V Y F A A V S M Q G Y K A D D Y A M T 270

atcgggttcccgggcagtgatcggtacgtcacttcttgggtgtggaagatcgtatcgaaaaacgagaaacaatcctcgatcgaaagt 900
I G F P G S T D R Y L T S W G V E D R I E N E N P R I E V 300

cgcggtatcaagcaaggcatctggaagggaagccatgagcgcagatcaggctaccggtatcaaatatgccagcaagtatgctcagagtgc 990
R G I K Q G I W K E A M S A D Q A T R I K Y A S K Y A Q S A 330

aactattggaagaattcggtatgaaccgggtctcgtcgtcttgacgtgataggtcgtaagcgtgccgaggaagagcattcgca 1080
N Y W K N S I G M N R G L A R L D V I G R K R A E E R A F A 360



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Fig. 4b

gactggatccgtaagaacggcaagagtgctgtctctatggcgatgtattgtcttctctcgaaaaggcttataaggaaggagccaagggccaac	1170
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cgtagatgacttattgagcgagacgctcttcggtgtaccgaggtggttcggttttcacagtttgccaacgcattggctacaaatcct	1260
RR EMTYLS ETLFGGT E V V R F A Q F A N A L A T N P	420
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DAHAGILKSLDKYKDYLPSLDRLKVLPA ML	450
gatattgtacgccggcgtatccctgccgacaagctccccgatattcaagaatgtaatcgacaagaaattcaaaagcgacacgacgaagaag	1440
DDIVRRRI PA DKLPDI FKNVI DKKFKGDTKK	480
tatgcagacttcgtattcgacaagagtgtggttccttatagcgacaagttccatgccatgctcaagtcctcgaagaaagtttggcc	1530
YYADFFVF DKSVVPYSD DKFHAMLKSM D K E K F A	510
aaaggctatcgagaaagatccggcagtagagctttccaagagcgtaatagctgtctgcgcgtatttcaggccgatgcgatggccaatgcc	1620
KAIEKDP AV ELSKVIAAARA IQA D A M A N A	540
tatgccattgagaagggaagcgtcttttcttcgcggttgctgagatgtaccgccgacgtgctctgcgagcgtatgccaaacttcacc	1710
YYAIEKGR LF FA GL FERE M Y P G R A L P S D A N F T	570
atgcgtatgactacggctccatcaagggatgaaccgcaggacggtgcctgggtacaactatcatcacgacggaaggcgctattggag	1800
MRMSYGS IKGYEPQDGA WYNYHTT T G K G V L E	600
aaagcaggatcctaagagcgatgagtttgcgtacaggagaatatcctcgacctcttcgcgaccccaaaaactatggtcgctatgccgagaac	1890
KKQDPKSD E F A V Q E N I L D L F R T K N Y G R Y A E N	630
gggtcagctccatatcgcttcctatcgaaacaacgacatcacgggcggtaaactccggttagccccgtatttcgataagaacggccgctctgac	1980
GGQLHIAFLSNNDIITGGN S GS P V F D K N G R L I	660
gggtcttcttcgatggcaactgggaagctatgagtggtgacatcgagttcgaacccgatctgcagcgcacaaatcagcgtggacatccgc	2070
GGLA F D G N W E A M S G D I E F E P D L Q R T I S V D I R	690
tacgttctcttcattgacaaaatggggtcagtgcccccgctctcatccaagagctgaagttgatctaa	2139
YVLFMI DKW G Q C P R L I Q E L K L I *	713



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SEQ ID No: 3	DPP-7	644	TGNSGSPVFDKNGRLIGLAFDGNWEAMSGDIEFEPDLQRTISVDIRYVLFM	695
			TGNSGSPV++ +IG+ + G +G + + + + +I + F	
SEQ ID No: 4	V-8	704	TGNSGSPVFNEKNEVIGIHWGGVPNEFNGAVFINENVRNFLKQNIEDIHFA	863

Fig. 5



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Fig. 6a

Fig. 6b

Fig. 6

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SEQ ID NO: 5	S1	1	MASQALGFLHONGLNTMKKWLISVAASAFASHADEGMMQPHQLP-AMADVLKAKGLEIDAKSISKLETFPPMN--AVTSL
SEQ ID NO: 6	S2	1	-----MRITAVALLVLTCTGATADEGMMQPYQMP-SIADKLSARGIDIPADKLEADLTSYPMN--AVVGL
SEQ ID NO: 7	X	1	-----MRFNLLISVLAITLITVDSITHAGEGMMVPOQLP-ETAGPLKQAGLQLSPEQLSNLTGDPMG--AVVSL
SEQ ID NO: 8	P1	1	-----MQMKLKSLILGAALLLGASGVAKADKGMWLLNELNQENLDRMRELGFITLPLDLSVYSFDPKPSITANAVVIFG
SEQ ID NO: 9	P2	1	-----MKKRLLILPLFAVILCLCQIAHADEGMMVMOQLG-RKYAQMKERGLKMKKEYDLYNPNNGTSLKDAVVLFD
	S1	78	GGCTASFVSPKGLVITNHHCAVGSIQVNSTPKNNLQDGFIAKTFADLPAAPGSRVYVITEDVINVTIRVKAGLENKGTG-
	S2	62	GYCTASFVSPQGLVITNHHCAVKAIOVNTKKEHNYLEQGFRLATSMCKEPSAGPNERLYITEAVFDVTSDDVTCKDLSQDP--
	X	66	GNC TASLVSPKGLVITNHHCAVGAIOVNSTPKNNLIKKEGFNALTOADEVSAGPVARIVYEQITDVITAOAKAALAAAGND
	P1	71	GGCTGITVSDQGLIFITNHHCGVGAIOSSSTVDHLYLRDGFVSRITMG-EELPIEGLSVKYLKRIIVKVTIDKRVGQLKGITD-
	P2	67	GGCTGEVNSDRGLVITNHHCGVDMIOAHSTLEHNYLENGFWAMREA-DELPNKDISVFLDKLEEDVIDVYKKDKALKDKDP
	S1	157	-----REFYQGVNQEKALVAECENKDEGYRCQVVSFHHGGLLEYLVKQLETRDVLVAVNPAGSVGKVGCGVDNMMWPRHT
	S2	140	-----LKRYEIEIENHSAKLIKSCFADENYRCNVRSFHNGLEVYLIIKQIMRDVRLVYAPFESVGGYGGIDINYEYPRHS
	X	146	-----PFKRITALETFPSKOEIAKCEPEBOGYRCQFFSFAGNIVRVFKNLEIKDRLVLYAPQCSVGKFGGVDNMMWPRHT
	P1	149	-----EMERLRKAQEVCOELAKKENADENQICIVPEPFYSNNEVFLIVDYDFKDVNMVFAFPSSVSGKFGGVDNMMWPRHT
	P2	146	NSMDYLSPKYLQKLADKAGKNFSKNNPGLSVELKAFYGGNLYLMFTKKTYTQVRLVAGPPTSTIGKFGADIDNMLWPRHT
	S1	231	GDYSFYRAYVSKNGKPAEPFSADNVPEPKSFLKVSAGVSEGDFFVMVAGYPGRITNRYRTATEVQNEFEMAYPEGKMLRER
	S2	214	GDFAFLRAYVGKDGKPAATSEENIIPYTPKSTLKVNAADVKGAGDGVFVAGYPGTITNRYNLTSELKFSADMLYPTQAKRYQL
	X	221	GDFSFYRAYVGKDGKPAATSKENIPYRPPKHLKFSQDPLGDDFFVMVAGYPGRITNRYALVAEFTENTAHMTIVFVIGQHFKN
	P1	224	GDFSIFRYVYAGADNRPAEYSKDNKPYPVYFAAVSMQGYKADDYAMTIGFPGSTIDRLYLSWGVEDRIENENNPRIEVRGI
	P2	226	GDFSIFRIYADKNGNPAIPYSEDNVPLKPKRFFNLSLGGVQENDYAMIMGFPGTTHRYFTASEVDEWKSIDNDIRIRMRDI
	S1	311	FTEITIKATAPEGSDEITKYVESQTAGLANVAKNFTSMTEFYGKSTMLADRKALAEAKLAEMTAKDSS---REAKYGKTLAEL
	S2	294	QIDTHEAMGQKDADIAIKYAGNMASMANRKKLANGLAGFKATDIVGIKQORENDFLAWLIKNNP-----LNQNLISEL
	X	301	LIALIEAASKQNPDIQVKYASTLAGLNNTSKNFDGQDGFRRINAIQKQSEETAVLAWLKQOGI---RGHEALAAHQTL
	P1	304	KQGIWKEAMSADQATRLKYASKYASQASNYMKNISGMNRGLARLDVIGKRAEERAFADWIKNCKSAV---YGDVLSLE
	P2	306	RQGVMLREMLADPQIKIMYSKAYASQANVYKRAIGANWAIKTRGLRONKQAMQDRLIAWGAQKQITP-----RYEEAVHE

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Fig. 6b

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Fig. 6b



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S1 388 DALLIAKSKAHQERDMILSYISSITIMPTANNMLYRLAHEKQLPDMQREPCFQDRMTRFKASMERIDRRYAAASVDKAVLFD
S2 368 EVLLAEQOLOTQTNVYFTNAQSSILLTAANNLYRLAKKQKSDAEREITGYQERDLAMFSSRLKRIDSGFDDVKVDKILMLQ
X 378 VDLTEQYKANQDRDEVLGQFNCSGVIGVAVNLVRLAHERTKSDAQREAGYQERDLPTIEGNLKQMERRYLPENTROMQOY
P1 381 KAYKEGAKANRENTYLSSETLFGCTIEVVRFAQFANALATNPDAHAGILKSLDKYKDYLPDLDRKVLPAMLDIVRRRIIPAD
P2 380 IDATVAKRADLRRLRYMMIEEGIRGIEFFARSPIPTEDETKALQCNDA SARKEAIDKIRTRYSKFANKDYSAEVDKAVAVA

S1 468 MLKRYAALPEACRLPAMEKKAFGIDNKNVNEAKLAKTEIDKMYAKITELGNKQVRLAMKESVDDDEKASKDPFTIQFAVAMVDTN
S2 448 DAN--AYLSQPNRVAALDNMNLNDKN--VSLAAKLDGLYSITITLTDQAORLAWMEADAKAFETSSDDPFTIRLAVALYDTN
X 458 MLTEYNKLPVKQORVAAIDVWLGIGIPAT-----L-KRLGDTKLSSSEERLKWFNADRAAFESSQDPATIRYAVATMPAL
P1 461 KLPDIFKINVIDKKFKQDTTKYADFVD--KS-----VVPYSDKFHAMLKSMDEKFAKAEKDPAVELSKSVIAAA
P2 460 MLTEYKLEIPYENLPLHLRLVKDRFAG---DVOAYVDDIFARSVFGSEAQFDFAFAVPSVEKLAEDPMVLFASSVFDEY

S1 548 MSEERKEKELDCELMKVRPOYMDALIANNLEQEKPVYADANSSLRVITVGHVKGYSPKDCGLVAVPFTTRLEGTVQKDTG-ID
S2 524 MAQEKAEKILACKLSTARPAYMAAVIDYKANNWPVYPDANGTIRISYGMVDSYQSRDALYKQFTTRLEGTVAKHTG-VE
X 530 LEITERONKIRTEGELKARPIYLAQALADYNKSHGKPEVYPDANGSLRIITFGCHVKGYSPKDCGMEYTPFTTLOGVMANKITG-VE
P1 530 RAICADAMANAYAEKGRLEFFAGIREMYP--CEMALPSDANFTMRMSYSGITKGYEPQDCAMNYHTTCKGVETEKQDPKSD
P2 536 RKLXNELRPYDDPLLRQORTYTAGLEEMDG--DQDQFPDANILFRFTYGOVKGYSPRDNVYXGHQTTLDGVMEKEDDPDNW

S1 627 PFDAPKQQLLELIKQKQYGDYMKSIDS-----VPVNFSLSTLDTTGGNSGSPITENGRAELVGLIF
S2 603 PYNAPKKLIDATSVQRFQDHLVKSVYQDPRGWICRLFSCLDKPEEFNSVPVNFLLSSVDTTGGNSGSPVFNKGKGLVGLNF
X 609 PFDSPKSLINAKAKSYANLADQRIGT-----VPVNFSLSDLDITGGNSGSPVLDAHGKLVGLAF
P1 608 EFAVQENTIDLFRTKNGYGRVAENGQLH-----IAF--LSNNDITGGNSGSPVFDKNGRLTGLAF
P2 614 EFVVDPKLKAVERKDFGRYADRSGRMP-----VAFCAITHTTGGNSGSPVMNANGELIGLNF

S1 686 DGVYESTIGGMAFDNEINRSIHVDSRYMLWVMKYLDDHADNLLAEMETVN--
S2 683 DSTYEAITKDWFFNPITITRAVHVDIRYILMMDEVDHADNLLKELDLVRN
X 668 DGNWESVSSNWFDPMTITIAVDSRYVQVINTENAPAPHLLEKELNLYR-
P1 665 DGNWEAMSGDIEFEEDLQRTISVDIRYVLEMDKW-----
P2 672 DRNWEVGGDIOYLADYQORSIIIVDIRYVLLVIDKNGCQORELDEMIVP-

Fig. 6a